



Attorney Docket No. _____

Patent

005950-833

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Shenggao Liu et al.

Application No.: 10/622,046

Filing Date: July 16, 2003

Title: HETEROATOM-CONTAINING DIAMONDOID TRANSISTORS

Group Art Unit: 2811

Examiner: ORI NADAV

Confirmation No.: 2268

**FOURTH
INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a **FOURTH** Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☐ No additional fee for submission of an IDS is required.
- ☒ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge _____ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of _____ is enclosed for the fee due.
- ☐ Charge _____ to credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By

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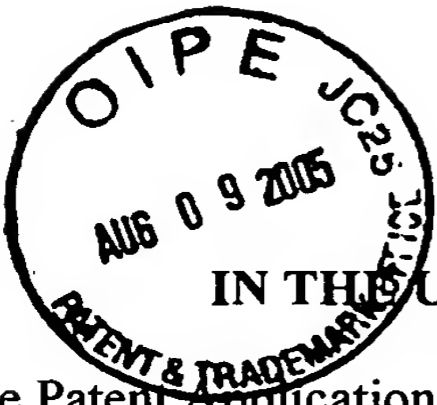
Date: Aug. 9 2005

BURNS DOANE

BURNS DOANE SWECKER & MATHIS LLP
INTELLECTUAL PROPERTY LAW

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INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

(8/04)



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FOURTH INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, copies of the documents cited are enclosed, except for copies of the listed U.S. patents and U.S. patent application publications, which are no longer required according to the July 11, 2003 waiver of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

The documents are being submitted after a first Office Action on the merits but prior to the closing of prosecution, therefore under 37 C.F.R. § 1.97(c), the fee set forth in 37 C.F.R. § 1.17(p) is enclosed.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

08/10/2005 GWORDOF1 00000029 10622046

01 FC:1806

180.00 OP

Date Aug. 9, 2005

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Substitute for form 1449A/PTO & 1449B/PTO		Complete if Known	
FOURTH INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/622,046
		Filing Date	July 16, 2003
		First Named Inventor	Shenggao Liu et al.
		Examiner Name	EDDIE C H LEE
Sheet	1	Attorney Docket Number	005950-833

U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
	6,861,569		Dahl et al.	01-17-2002
	4,225,734		McMurry	09-30-1980
	2004-0059145	A1	Liu et al.	03-25-2004

FOREIGN PATENT DOCUMENTS											
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	STATUS						
					Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec
	WO 92/13909	A1	PCT	08-20-1992							X

NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	Erdemir Ali, Christophe Donnet, "Tribology of Diamond, Diamond-Like Carbon, and Related Films", Chapter 24 from <i>Modern Tribology Handbook</i> , Vol. 2, CRC Press, pp. 871-908 (2001).
	Frommer, Jane E. and Ronald R. Chance "Electrically Conductive Polymers", <i>High Performance Polymers and Composites</i> , Jacqueline I. Kroschwitz Ed., John Wiley & Sons, New York, pp 174-219.
	Moore, Jeffrey S. and Stephen Lee, "Crafting Molecular Based Solids", <i>Chemistry and Industry</i> , pp. 556-560, July 18, 1994.
	Courtney T, et al. "The Chemistry of Diamantane. Part I. Synthesis and Some Functionalization Reactions", <i>J. Chem. Soc., Perkin Trans. 1</i> , 2691-2696 (1972).
	Blaney, F. et al., "Chemistry of Diamantane. Part II. Synthesis of 3,5-Disubstituted Derivatives", <i>Synth. Commun.</i> 3(6):435-439 (1973).
	Sasaki, Tadashi, et al., "Synthesis of Adamantane Derivatives. XII. The Schmidt Reaction of Adamantan-2-one ^{1,2} ", <i>J. Org. Chem.</i> 35(12):4109-4113 (1970).
	Krishnamurthy, V.V. and Raymond C. Fort, Jr., "Heteroadamantanes. 2. Synthesis of 3-Heterodiamantanes ^{1a,b} ", <i>J. Org. Chem.</i> 46(7):1388-1393 (1981).

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.